Editorial explains why electrophysical agents are still important in physiotherapy education. (Comment on Laakso EL et al, *Australian Journal of Physiotherapy* 48: 251-254.)

The recent Editorial by Laakso et al (2002) is, quite simply, brilliant. The authors are to be commended for their insight, foresight and courage in writing such an editorial in the face of mounting criticism about the use and inclusion of electrophysical agents in physiotherapy practice and education.

Reading this editorial gave me comfort and hope. Comfort from the fact that these authors not only know their stuff, but they have the research, publications, and expertise to back them up. They are not shooting blindly or randomly from the hip. These are well read and well respected researchers, educators and writers. It gave me hope because as an educator myself, teaching electrophysical agents for the past 21 years, I have often felt I am in an uphill battle against the manual therapists and non-electrotherapy users in my profession. I have been told that more articles and research projects state that placebo is more effective than TENS or ultrasound than there are citing effectiveness. I have been told that electrophysical agents should be either dropped or severely cut back in entry-level physiotherapy curricula. However, those same critics cannot show me evidence that Maitland is more effective than Kaltenborn or Paris or McKenzie, or even more effective than no manual therapy, yet the physiotherapy world is rampant with manual therapy courses and teaching gurus. Where is the evidence that Sahrmann techniques really work?

I constantly scour the literature for articles and research studies that are done well and that examine the use of electrophysical agents from a clinical point of view. How will this agent help me treat my patient - or will it? If the article does not have any clinical relevance, then I wonder how can I make it useful to my students? So what if ultrasound makes nerve conduction velocity increase? How will that help my patient? However, if an article states that ultrasound can heat connective tissue, and that heat helps to increase tissue extensibility with stretching and exercise, then ultrasound can, and will, remain a part of my treatment program for that patient.

These authors have helped me to explain to my students why we teach electrophysical agents and why they are still an important part of physiotherapy education They have articulated not only the need to keep electrophysical agents as part of entry-level curricula, but also the need to keep them as part of a physiotherapist's treatment approach.

I am excited and looking forward to sharing these authors' insights and thoughtful reasoning with my fellow electrophysical agents instructors in Canadian physiotherapy programs.

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Selective citation did not advance debate on electrophysical agents. (Comment on Laakso EL et al, *Australian Journal of Physiotherapy* 48: 251-254.)

The recent editorial by Laakso and colleagues argued that there was sufficient evidence to justify the continued inclusion of electrophysical agents as a major study area within entry-level curricula. They stated that "despite the barriers, there are some positive, high quality systematic reviews supporting the use of electrophysical agents…". In support of this assertion, they cited a Cochrane review (Flemming and Cullum 2002a). My view is that the citation of this review to support their assertion is quite misleading because it seems contrary to the reviewers' conclusions.

The Flemming and Cullum review located seven low quality trials, so pooling was not performed, with none of the individual trials finding a difference in healing rates in favour of ultrasound. Flemming and Cullum suggested that their results had the following implications for practice:

"There is insufficient evidence in this review to support the routine use of therapeutic ultrasound in practice. The available evidence does suggest a benefit of ultrasound therapy in the healing venous leg ulcers. However due to the poor quality of the studies included in the review this effect needs interpreting with caution. As all of the studies are underpowered the effect estimates are extremely imprecise."

In the same issue of the Cochrane Library, Flemming and Cullum published four other reviews of electrophysical agents for the treatment of skin lesions and the implications for practice from each review are reproduced below:

1. "There is no reliable evidence of benefit of using electromagnetic therapy in the treatment of pressure sores. The possibility of benefit or harm cannot be ruled out due to the small number of trials with methodological limitations and small numbers of participants."
2. "There is insufficient evidence from RCTs to support the routine use of electromagnetic therapy in practice."
3. "There is insufficient evidence in this review to give a clear direction for practice. There is no evidence of a benefit of lasers on leg ulcer healing, though there is not clear evidence of no benefit as the trials are small and of poor quality."
4. "There is no evidence of a benefit of using ultrasound therapy in the treatment of pressure sores. The possibility of a beneficial or a harmful effect cannot be ruled out due to the small number of trials with methodological limitations and small numbers of participants."

My letter should not be seen as support for those in this debate who wish to abandon the use of electrophysical agents. My position is that the only meaningful way to eventually resolve this debate is to carefully consider all the